To: Meadows, Kelly[Kelly.Meadows@tetratech.com]
Cc: Colarusso, Phil[colarusso.phil@epa.gov]; Houlihan, Damien[houlihan.damien@epa.gov]
From: Chan, Jennifer
Sent: Thur 8/14/2014 6:38:30 PM
Subject: RE: WA 3-28, Pilgrim Nuclear Power Station, Technical Assistance, EP-C-11-009 - literature review

Hello Kelly,

After today, I am out of office until August 26th. I understand your team is close to completing this task. When you email me the deliverable, please cc Damien Houlihan and Phil Colarusso.

thanks

Jennifer Chan

US EPA, OW, OWM

Water Permits Division

chan.jennifer@epa.gov

202-564-3067 (Tues, Wed, Thurs)

From: Chan, Jennifer
Sent: Thursday, July 10, 2014 1:21 PM
To: Meadows, Kelly
Subject: TD: WA 3-28, Pilgrim Nuclear Power Station, Technical Assistance, EP-C-11-009 - literature review

Kelly –

Please provide technical assistance to EPA Region 1 for development of permit for the Pilgrim Nuclear Power Station, Plymouth, MA as outlined in the emails below.

Jennifer Chan

US EPA, OW, OWM

Water Permits Division

chan.jennifer@epa.gov

202-564-3067 (Tues, Wed, Thurs)

From: Houlihan, Damien
Sent: Thursday, July 10, 2014 9:52 AM
To: Chan, Jennifer
Cc: Colarusso, Phil
Subject: FW: Tetratech work

Hi Jennifer –

We would like Tetra Tech to help with 316(a) related task. Researching temperature related effects (both lethal and sublethal) for the species listed below. We are available to discuss. Thanks.

Damien

From: Colarusso, Phil
Sent: Thursday, July 10, 2014 9:28 AM
To: Houlihan, Damien
Subject: Tetratech work

Damien,

The contractor should do a literature review targeting the following species:

Irish moss (*Chondrus crispus*)

American lobster (*Homarus americanus*)

Winter flounder (*Pseudopleurocnectes americanus*)

Rainbow smelt (*Osmerus mordax*)

Cunner (*Tautogolabrus adspersus*)

Alewife (*Alosa pseudoharengus*)

Atlantic silverside (*Menidia menidia*)

Atlantic cod (*Gadus morhua*)

Haddock (*Melanogrammus aeglefinus*)

Pollock (*Pollachius virens*)

Silver Hake (*Merluccius bilinearis*)

Red Hake (*Urophycis chuss*)

White Hake (*Urophycis tenuis*)

Calanus copepod (*Calanus finmarchicus*)

They should focus on all life stages, lethal temperatures, but even more importantly sublethal effects. Sublethal effects can be behavioral (avoidance, delayed reproduction), or physiological.

Let me know if you need more detail.

Phil